

REMARKS

Claims 12, 19-29, 31, 33-40 are pending in the application.

Drawings

The drawings are objected to under 37 CFR 1.83(a) for not showing all features specified in the claims. The examiner refers to the chin support and the spring-type lock.

Applicant submits several drawings, respectively, drawing changes. Fig. 1 has been amended by showing, for a better understanding of the invention, means for supporting the upper body of a person sitting on the seat. New Fig. 1a is submitted to show supports that engage under the armpits of a person. New Fig. 1b is submitted to show a stomach support as well as a chin support. In order to show the spring-type locks, Fig. 3 has been amended by showing detailed views in Figs. 3a and 3b of the schematically illustrated spring type locks where compression of the spring prevents further movement of the attached parts, i.e., locks the parts.

Reconsideration and withdrawal of the objection to the drawings is respectfully requested in view of the submitted replacement sheets and new drawing Figures.

Specification

On page 1a, the reference to claim 1 has been removed and the corresponding text portion has been added.

Claim Rejections - 35 U.S.C. 112

Claims 12, 19-31, 33-40 stand rejected under 35 U.S.C. 112, 2nd paragraph, as being indefinite.

The examiner objects in claims 12, 19, and 20 to the limitation "the upper body" as not having antecedent basis. Claim 12 has been amended by introducing "upper body" properly with the indefinite article so that the rejection of claims 12, 19, 20 no longer applies.

Claim 30 has been canceled.

Claim 35 has been rewritten in view of the examiner's remarks.

Reconsideration and withdrawal of the rejection of claims 12, 19-31, 33-40 under 35 USC 112 is respectfully requested in view of the presented amendments.

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Rejection under 35 U.S.C. 102

Claims 12, 19-30, 39-40 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Deeley Jr. (US 3,280, 462)*.

Claim 12 has been amended to set forth the following features:

a base,

means for supporting an upper body of a person, wherein said means for supporting is connected to said base;

driving means connected to said base;

a seating surface connected to said driving means;

said driving means driving said seating surface so that at least one point of said seating surface is forced to perform a periodic, continuous and cyclical movement in at least two directions of motion, wherein said periodic, continuous and cyclical movement comprises a first period of motion and a second period of motion, wherein a number of said first period of motion is larger than a number of said second period of motion;

wherein said seating surface is not connected to said means for supporting and moves independently of said means for supporting.

Accordingly, the seating surface has driving means connected thereto and the driving means drive the seating surface such that at least one point of the seating surface is forced to perform a periodic, continuous and cyclical movement. Moreover, this periodic, continuous and cyclical movement has a first period of motion and a second period of motion defined such that the number of the first period of motion is larger than the number of the second period of motion. Also, the seating surface is not connected to the means for supporting the upper body and **moves independently** of the means for supporting.

The cited prior art reference shows a dental chair that has a seat 58 with an extension 64 supporting the legs and a back 62 connected to the seat to allow limited angular movement relative to the seat. The corresponding attachment and adjustment mechanism is arranged in the interior of the seat (see col. 6, lines 44-55). The chair has a base 46 that can be moved across the floor by means of an air cushion that is generated between the bottom surface 48 of the base 46 and the floor. In order to provide such an air cushion, an electric motor 54 operating a blower or fan 52 is provided. When the chair

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is to be moved across the floor, the dentist or dental assistant turns on the fan 52 so that the air cushion is generated and the dentist or dental assistant can move the chair with ease across the floor. Therefore, there is no drive connected to the seating surface that moves the seating surface in a periodic, continuous and cyclical movement. The fan 52 provides nothing but an air cushion but does not drive the chair. When the fan 52 is actuated, it does not cause the seating surface to be moved in any way. Movement of the chair can only be realized by the dentist: he must push the chair.

Elevating the chair seat 58 relative to the base 46 is possible by actuating a gear reduction unit 64, for example, a ball screw 68, so that the pedestal 56 is lifted or lowered relative to the base. The electric motor 66 enables only a vertical movement up or down, not a periodic, continuous, cyclical movement in at least two directions of motion.

The chair is preferably constructed such that the chair seat 58 is non-rotatable relative to the base 46 (col. 7, lines 14ff) in order to permit steering of the chair base 46 by the dentist when the chair is to be moved across the floor by means of the air cushion.

As described in col. 7, line 47, to col. 8, line 12, the positioning of the chair and of the patient seated in the chair requires sequential actions by the dentist. After turning on the fan 52 that generates the air cushion, the dentist can move the chair across the floor to the desired location. At the completion of such movement across the floor, the motor 54 is stopped and the fan turned off so that the chair base 46 rests firmly on the floor again. The chair seat 58 can then be raised or lowered by turning on switch assembly 72 for energizing motor 66 and moving the seat up or down. When the angular position of the back 62 relative to the chair 58 is to be changed another switch must be actuated so that the back of the chair can be adjusted.

Therefore, this prior art reference does not disclose a drive connected to the seat surface that moves at least one point of the seat surface in a periodic, cyclical, continuous movement because the only drive connected to the seat surface is the motor 66 and the elevating means 68 enabling only a vertical movement up or down in one direction only.

The cited reference does not disclose and does not suggest a periodic, continuous, and cyclical movement in at least two directions of motion. The dental chair is designed to provide an adjustment of a proper treatment position, i.e., horizontal movement across the

floor to the desired treatment location; subsequent, vertical movement positioning the patient at the desired height for treatment; and a possible adjustment of the back relative to the seat (this is not a movement of the seat surface). *Deeley* teaches sequential independent steps for adjusting the seat but does not teach a periodic, continuous, cyclical movement (all three features are combined in this movement!):

- "periodic" means *occurring or recurring at regular intervals* (see Merriam-Webster Collegiate Dictionary)
- "cyclical" means (see Merriam-Webster Collegiate Dictionary)
a : of, relating to, or being a cycle
b : moving in cycles <cyclic time>
- "continuous" means (see Merriam-Webster Collegiate Dictionary) *marked by uninterrupted extension in space, time, or sequence*

The dental chair of *Deeley* does not perform such a movement and is not designed or intended to perform such a movement. The first movement of the dental chair across the floor must be carried out by the dentist - it is not performed by a drive means. The second movement that is carried out after the initial positioning by the dentist is a vertical movement for height adjustment of the seat: this is a simple movement up or down into the desired position. The electric drive and the ball screw driven by the electric drive will not cause the chair to move periodically, cyclically, and continuously, but only **linearly up or down in a single direction of motion into a desired position**. The disclosure moreover cannot suggest a periodic, cyclical, continuous movement because the dentist is only interested in positioning the patient properly for the dental treatment as quickly as possible; a periodic, cyclical and continuous movement of the seat and the patient is entirely undesirable and more than detrimental for a proper dental treatment of the patient

Also, the claim 12 sets forth that the means for supporting the upper body of a person is not connected to the seating surface and that the seating surface moves independently of the means for supporting the upper body. The back 62 of the dental chair is fixedly connected to the chair seat 58. Therefore when the seat 58 is moved, the back 62 is forced to move together with the seat - the adjustability of the back 62 relative to the

seat of no concern in this respect since a movement of the seat 58 still moves the back 62 - no matter what the position of the back 62 relative to the seat 58.

The invention as claimed in claim 12 is therefore neither anticipated nor obvious in view of the prior art reference.

Rejection under 35 U.S.C. 103

Claims 31 and 33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Deeley Jr. (US 3,280, 462)* and *Eley*.

Claims 31 and 33 should be allowable as dependent claims of claim 12.

Claims 34-38 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Deeley Jr. (US 3,280, 462)*.

Claims 34-38 should be allowable as dependent claims of claim 12.

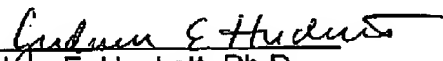
CONCLUSION

In view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Should the Examiner have any further objections or suggestions, the undersigned would appreciate a phone call or e-mail from the examiner to discuss appropriate amendments to place the application into condition for allowance.

Authorization is herewith given to charge any fees or any shortages in any fees required during prosecution of this application and not paid by other means to Patent and Trademark Office deposit account 50-1199.

Respectfully submitted on January 13, 2004,


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GEH/Encl.: - replacement drawing sheets Fig. 1 and Fig.3 (2 sheets)
- new drawing sheets Figs. 1a and 1b (2 sheets)

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